STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING
SUITE 700, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-0791

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

TO: Will Reid, Assistant Chief Engineer of Operations

FROM: Brad Freeze, Director of Traffic Operations

SUBJECT: **Proprietary Item Request and Justification**
City of Murfreesboro

1) **Traffic Signal Controllers**
2) **Traffic Signal Network Switches**

1) **Traffic Signal Controllers:** The City of Murfreesboro is requesting that Econolite Cobalt-C controllers be used in all signalization projects within the City's I-24 Smart Corridor project area over the next three years where Federal and/or State funding are used. The I-24 Smart Corridor project area is described below along with the justification for this request.

2) **Traffic Signal Network Switches:** The City of Murfreesboro is requesting that Etherwan 3575 network switches be used in all signalization projects within the City's I-24 Smart Corridor project area over the next three years where Federal and/or State funding are used. The I-24 Smart Corridor project area is described below along with the justification for this request.

The I-24 Smart Corridor area is described as:

- I-24 from the SR-1(US-41/Murfreesboro Pike, Exit 52) interchange in Davidson County to Joe B. Jackson Parkway, Exit 84) interchange in Rutherford County.
- SR-1 (US-41/Murfreesboro Pike) from the I-24 interchange in Davidson County to Joe B. Jackson Parkway in Rutherford County.
- The major connecting corridors between the I-24/SR-1 corridors which includes SR-155 (Briley Parkway), SR-255 (Harding Place/Donelson Pike), SR-254 (Bell Road), SR-171 (Old Hickory Blvd./Hobson Pike), Waldron Road/Parthenon Blvd., SR-266 (Sam Ridley Parkway), SR-102 (Almaville Road/Nissan Drive), I-840, Medical Center Parkway, SR-96 (Old Fort Parkway), SR-99 (New Salem Hwy.), and SR-10 (US-231/Shelbyville Hwy./South Church Street), and Joe B. Jackson Parkway.

For the above items, the following are justifications for these requests:

- The I-24 Smart Corridor strategy includes improving corridor reliability by reducing congestion and delays through traffic signal optimization, interconnectivity, and the installation of connected vehicle technologies. The effective operation of this strategy is reliant on Intelligent Transportation System field elements such as efficient communications between traffic signal controllers.
- The Nashville Metropolitan Government of Nashville currently has proprietary approval for Econolite Cobalt-C controllers and Etherwan 3575 network switches that expires on 7/29/2019.
- The Nashville Metropolitan Transit Authority is in the process of implementing a Transit Signal Priority (TSP) project within the I-24 Smart Corridor area along SR-1 (US-41/ Murfreesboro Pike) and this project will also be installing Econolite Cobalt-C controllers and Etherwan 3575 network switches.
- The use of these products will reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system.

I, Brad Freeze, Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.

Assistant Chief Engineer of Operations

10/23/17
Date

City of MURFREESBORO TENNESSEE

. . . creating a better quality of life.

October 16, 2017

Brad Freeze, Director, Traffic Operations Division
Tennessee Department of Transportation
Suite 1200, James K. Polk Building
505 Deadrick Street
Nashville, TN 37243

SUBJECT: **Proprietary Item Request and Justification**
I-24 Smart Corridor: Active Arterial Management Phase
City of Murfreesboro

Dear Brad:

The City Murfreesboro is requesting that Econolite Cobalt-C controllers and Etherwan 3575 one Gigabit (or equivalent) network switches be used in all signalization projects within the I-24 Smart Corridor area over the next three years where Federal and/or State funding are used.

The I-24 Smart Corridor area is described as:

- I-24 from the SR-1(US-41/Murfreesboro Pike, Exit 52) interchange in Davidson County to Joe B. Jackson Parkway, Exit 84) interchange in Rutherford County.
- SR-1 (US-41/Murfreesboro Pike) from the I-24 interchange in Davidson County to Joe B. Jackson Parkway in Rutherford County.
- The major connecting corridors between the I-24/SR-1 corridors which includes SR-155 (Briley Parkway), SR-255 (Harding Place/Donelson Pike), SR-254 (Bell Road), SR-171 (Old Hickory Blvd./Hobson Pike), Waldron Road/Parthenon Blvd., SR-266 (Sam Ridley Parkway), SR-102 (Almaville Road/Nissan Drive), I-840, Medical Center Parkway, SR-96 (Old Fort Parkway), SR-99 (New Salem Hwy.), and SR-10 (US-231/Shelbyville Hwy./South Church Street), and Joe B. Jackson Parkway.

The following are justification items for this request:

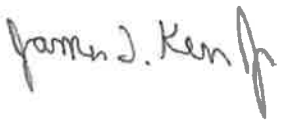
- The corridor strategy includes improving corridor reliability by reducing congestion and delays through traffic signal optimization, interconnectivity, and the installation of connected vehicle technologies. The effective operation of this strategy is reliant on Intelligent Transportation System field elements such as efficient communications between traffic signal controllers.
- The Nashville Metropolitan Government of Nashville currently has proprietary approval for Econolite Cobalt-C controllers and Etherwan 3575 network switches that expires on 7/29/2019.
- The Nashville Metropolitan Transit Authority is in the process of implementing a Transit Signal Priority (TSP) project within the I-24 Smart Corridor area along SR-1 (US-41/ Murfreesboro Pike) and this project will be installing Econolite Cobalt-C controllers and Etherwan 3575 network switches.

Transportation Department
111 West Vine Street * Post Office Box 1139 * Murfreesboro, Tennessee 37133-1139 * Phone 615 893 6441 * Fax 615 849 2606
TDD 615 849 2689 www.murfreesborotn.gov

- The use of these products will reduce the time required to maintain the system overall and help keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system.

Please let me know if you have questions or need further information regarding this request.

Sincerely,



Jim Kerr
Transportation Director

Cc: Steve Bryan, TDOT Traffic Operations Division Section Manager

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